

CLAIMS

1. A harmful material remediating agent comprising a metal oxide and a reducing material.
2. A harmful material remediating agent according to claim 1, wherein the reducing material is a metal and the harmful material to be remediated is an organic compound.
3. A harmful material remediating agent according to claim 2, wherein the metal oxide is iron oxide and/or titanium oxide.
4. A harmful material remediating agent according to claim 2, wherein the metal oxide is a suboxide.
5. A harmful material remediating agent according to claim 2, wherein the metal is at least one metal selected from the group consisting of iron, aluminum, zinc, copper and magnesium.
6. A harmful material remediating agent according to claim 2, wherein the metal is iron and the metal oxide is iron oxide.
7. A harmful material remediating agent according to claim 3, wherein the iron oxide is at least one iron oxide selected from the group consisting of magnetite, hyper-reduced magnetite and berthollide.
8. A harmful material remediating agent according to claim 2, wherein the mixing ratio of the metal and the metal oxide is in the range of 0.02 : 1 - 9 : 1 in weight ratio.

9. A harmful material remediating agent according to claim 1, wherein the harmful material to be remediated is a nitrate and nitrite nitrogen-containing compound and the remediating agent is used under normal pressure.
10. A harmful material remediating agent according to claim 9, wherein the reducing material is a metal and/or a reducing agent.
11. A harmful material remediating agent according to claim 9, wherein the metal oxide is iron oxide and/or titanium oxide.
12. A harmful material remediating agent according to claim 9, wherein the metal oxide is a suboxide.
13. A harmful material remediating agent according to claim 11, wherein the iron oxide is magnetite, hyper-reduced magnetite and/or berthollide.
14. A harmful material remediating agent according to claim 11, wherein the titanium oxide is a titanium oxide having a non-stoichiometric composition.
15. A harmful material remediating agent according to claim 9, wherein the reducing material is iron and the metal oxide is iron oxide.
16. A harmful material remediating agent according to claim 9, wherein the reducing material is at least one reducing agent selected from the group consisting of metal sulfites, metal hydrogensulfites, metal thiosulfates, metal dithionites, phosphorous acid

and metal salts thereof, and hypophosphorous acid and metal salts thereof.

17. A harmful material remediating agent according to claim 9, wherein the reducing material is a reducing agent and the mixing ratio of the reducing agent and the metal oxide is in the range of 0.1 : 1 - 5 : 1 in weight ratio.

18. A harmful material remediating agent according to claim 9, wherein the reducing material is at least one metal selected from the group consisting of iron, aluminum, zinc, copper and magnesium.

19. A harmful material remediating agent according to claim 9, wherein the reducing material is a metal and the mixing ratio of the metal and the metal oxide is in the range of 0.001 : 1 - 3 : 1 in weight ratio.

20. A method for remediating harmful materials which comprises introducing the harmful material remediating agent of claim 1 into soil to decompose the harmful materials in the soil.

21. A method for remediating harmful materials which comprises introducing the harmful material remediating agent of claim 1 into water to decompose the harmful materials in the water, and then separating the remediating agent by solid-liquid separation.